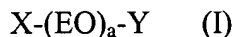


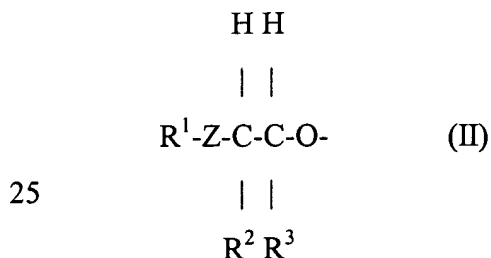
Claims:

1. A defoaming agent for cementitious compositions, obtained by mixing at least one polyethylene oxide derivative and at least one nonionic defoaming agent, wherein the polyethylene oxide derivative has at one end a hydrophobic group with at least one of a
5 branched structure and an unsaturated bond, and at the other end an anionic group.
2. The defoaming agent according to claim 1, wherein the unsaturated bond is a double bond.
3. The defoaming agent according to claim 1 or claim 2, wherein the polyethylene oxide
10 derivative is a compound expressed by formula I:



wherein X is a hydrophobic group comprising at least one of a branched structure and an
15 unsaturated bond; Y is an anion group; EO is $-\text{CH}_2\text{CH}_2\text{O}-$ and a is an integer from 6 to 100.

4. The defoaming agent according to claim 3 wherein a is an integer from 15 to 60.
5. The defoaming agent according to any one of claims 1 to 4, wherein the hydrophobic group
20 comprising at least one of a branched structure and an unsaturated bond is expressed by formula II:

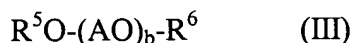


wherein Z is O or an amine; R^1 , R^2 and R^3 are each independently alkyl or phenyl, naphthyl, alkenyl, alkylene oxide with 2 to 4 carbon atoms or any derivatives thereof, and R^2 and R^3 may
30 also be each independently H, with the proviso that R^1 is not alkyl when R^2 and R^3 are both H.

6. The defoaming agent according to any one of claims 1 to 5, wherein the anion group is -SO₃M, -(CH₂CH₂)OSO₃M, -R⁴COOM (wherein R⁴ is -C_mH_{2m}- (in which m is an integer 10 > m > 0 and preferably 1 or 2) or a phenyl group), -PO₃M or -CO(CH₂)_nCOOM (wherein M is Na salt, K salt, Ca salt, Mg salt, NH₄ salt or H, n is 2 or 3).

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7. The defoaming agent according to any of the claims 1 to 6 wherein the nonionic defoaming agent is expressed by formula III:



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wherein R⁵ and R⁶ are each independently an aliphatic hydrocarbon with 10 to 25 carbon atoms, an alkyl group with 1 to 5 carbon atoms or H; AO is a block polymer and/or a random polymer constituted of alkylene oxide with 2 to 3 carbon atoms and b is an integer from 5 to 500.

15 8. The defoaming agent according to any one of claims 1 to 7 obtained by mixing the polyethylene oxide derivative and the nonionic defoaming agent at a ratio in the range of 20:80 to 60:40 (wt%).

9. The defoaming agent according to claim 7, wherein the nonionic defoaming agent, when
20 converted to polyethylene glycol, has a weight average molecular weight in the range from 300 to 30,000 and the weight ratio of the ethylene oxide in said molecular weight is in the range of 5 to 80 %.

10. A water-reducing composition comprising a blend of a polycarboxylate-type high
25 performance air-entraining (AE) water-reducing agent and a defoaming agent according to any one of claims 1-9.

11. A method of defoaming a cementitious composition by the addition to the composition of a defoaming agent according to any one of claims 1-9.